# Summary

This project focuses on the development of a lithium battery charger type 14500, powered by solar and wind energy sources. When active, the system utilizes the battery to automatically orient the solar panel towards the sun, optimizing the efficiency of the charging process. In emergency situations or during power outages, the device can operate manually, allowing for manual adjustments to the orientation of the solar panel.

# Features

* Solar panel with a power generation of 6V and 100mA.
* Solar charging module with the ability to adjust to different voltages (6V, 9V, 12V, 18V, and 24V), providing flexibility to enhance the charging process.
* Vertical wind turbine (does not require rotation to find the optimal angle) generating up to 5.5V and 100mA.

# What do you need to know?

Imagen de la pantalla de un video juego

Descripción generada automáticamente con confianza baja

1. ON switch.
2. Battery load estimation.
3. Spaces to insert a battery.

# Usage

* Battery Installation: Switch the battery to the ON position and proceed to place the 14500 battery in the corresponding holder, making sure it is oriented correctly or connecting it to the PH2.0 DIP socket. If the battery is connected incorrectly, the battery warning indicator will activate; in such a situation, it will be necessary to adjust the battery mounting direction. Once the battery is correctly installed, the ON indicator will light up.
* Place the product outdoors, ensuring that the rotation angle is from east to west so that the panel can turn towards the sun at all times.
* With the current specifications, the battery would take approximately 6 to 7 hours to be fully charged."